INFORMATION LETTER

Not for Publication NATIONAL CANNERS ASSOCIATION For Members Only

No. 582 Washington, D. C. December 21, 1935

Industrial Council to Meet in January

After a conference with the President on December 19th, Major Berry announced that he would call a meeting of the Council for Industrial Progress for January 6th. He explained that the holidays had interfered with an earlier meeting of the delegates of industry and labor selected at the recent industrial conference.

The Coordinator for Industrial Cooperation told the newspaper correspondents that a number of groups that failed to select delegates at the conference have since done so and that industry would be better represented at the meeting on January 6th than seemed possible at the close of the conference.

It is understood that present plans do not contemplate announcement of names of delegates until the council convenes. It is also understood that there will be no announcement of any official program or suggestions as to how the return of prosperity can be stimulated.

Labor and industry are to have equal representation on the council, and the American Federation of Labor has indicated that it will cooperate.

Major Berry said that automobiles, steel, cotton textiles, and lumber had not changed their minds about remaining away from the council, but that those who had not cooperated to date would be welcome if they finally decide to come in.

Trade Agreement with Honduras Signed

The reciprocal trade agreement between the United States and Honduras, signed on December 18th, makes a number of reductions in the rates of duty imposed by Honduras on canned foods imported from the United States. The agreement remains to be approved by the Honduran legislature and confirmed by the President of the United States, and will come into force thirty days after the exchange of ratifications.

The agreement will remain in force for one year unless sooner terminated pursuant to provisions in the agreement, and unless at least six months before the end of the term of one year the government of either country gives notice of intention to terminate the agreement, it will remain in force thereafter until six months notice shall have been given.

Because most of the Honduran products imported into the United States already are on the free list, few changes in United States duties are made by the treaty. It binds the United States to continue on its free list, for the term of the agreement, bananas, coffee, cacao beans and shells, sarsaparilla root, and raw deerskins. It reduces the duty on pineapples in crates from 50 cents to 35 cents per crate of 2.45 cubic feet, and in bulk from 1-1/6 cent to 9/10 cent each. The duty on prepared or preserved guava is reduced from 35 per cent ad valorem to 17½ per cent, and on mango and guava pastes and pulps from 35 per cent ad valorem to 28 per cent.

Concessions by Honduras affect 37 commodities, including reductions on 17 items. The following table, compiled from the State Department's analysis of concessions, shows the reductions made by Honduras on canned foods and some related items. The rates of duty are stated in lempiras (lempira equals 49 cents U. S. currency in November) per gross kilo (kilo equals 2.204 pounds).

	Rate of duty per gross kilo		Reduction in duty
	Old *Lempiras*	New *Lempiras*	*Per cent*
Hams, sausages and other kinds of meat, preserved or packed in containers of tin, earthenware and glass, except salt beef and corned beef	0.42 and 0.50	0.27	36 and 46
Canned fruits	.52	.14	73
Dried fruits	.12 and .32	.08	33⅓ and 75
Canned tomatoes (including tomato paste), corn, peas and asparagus	.32 .38 and .42	.11	66 71 and 74
Condensed milk	.30	.20	33⅓
Evaporated milk	.30	.15	50
Canned sardines, prepared or preserved in tomato, mustard or other sauces, and canned salmon, prepared or preserved in any form	.42	.14	67

Preservers Seek Trade Practice Conference

The Federal Trade Commission has set January 6th as the date on which to hear the request of the National Preservers Association, which seeks the adoption of trade practice rules under the trade practice conference procedure of the Commission.

At this preliminary hearing the Preservers Association will submit proposed rules which may be made the subject of public hearing at a later date. While the proposed rules have not been made public

by the Commission, it is understood that they would include definitions and standards for various products of the industry, as well as rules to govern various trade practices.

Setting an Editor Right as to Botulism

Recently there were several deaths in California caused by botulinus poisoning resulting from the eating of imported canned foods, and a Hollywood newspaper published an editorial in which it was stated that most of the botulism deaths resulting from commercially canned foods are attributable to the food having been too long in the can. The editorial further stated that some foods deteriorate in cans more rapidly than others, and some are more susceptible to metallic action than others.

Dr. K. F. Meyer, Director of the Hooper Foundation and Professor of Bacteriology at the University of California, internationally recognized authority on the subject of botulism, wrote a letter to the editor of the Hollywood newspaper which will be of interest to every canner. In this letter Dr. Meyer said:

Those of us who labor in the interest of public health appreciate the significance and the importance of editorial comments intended to prevent tragic deaths from botulism. In this respect your assistance is most commendable and deserves general recognition. However, since the editorial in question contains implications which are not supported by facts, I take the liberty to submit to you for consideration the newer knowledge on botulism. I trust that this information may help to prevent botulism at its root, which continues to be inadequate sterilization of non-acid articles of food in the home or in foreign countries.

(1) In my possession are the histories of nearly 250 outbreaks or single intoxications of botulism in the United States (1899-1935). There is no doubt that human botulism is due to the poison or toxin elaborated by a bacterium, Bacillus botulinus, in the hermetically sealed, airfree but incompletely sterilized can or glass container. Singularly, it is a fact that 85 per cent of the intoxications have followed the ingestion of home canned food which was preserved in glass containers. Obviously the disease botulism is in no way attributable to a metallic poison formed within the tin container. Provided the content of a glass or tin receptacle is properly sterilized in order to kill every heat resistant spore of the bacillus, the canned foods usually causing botulism (string beans, corn, spinach, etc.) may be kept for years at any temperature and altitude, and remain perfectly wholesome.

(2) Permit me to emphasize that since 1925 not one single case of botulism has been connected with commercially canned food packed and preserved in the United States. The more recent outbreak in San Francisco (responsible for your comment) as well as two others in 1929 and 1931, were due to commodities or specialties packed in a foreign country. The remarkable achievement of eliminating botulism from commercially canned foods is the result of intensive investigations culminating in effective methods of sterlization and continuous inspection of the products before they reach the consumer. The protective measures which the California State Department of Public Health has instituted through its cannery inspection service protect the public from botulism. As Californians we should all be proud of this record.

(3) The inspection procedures, the maintenance of production records and the supervision of the retorting operations demand that each can is readily identified. For this reason each container carries a set of letters or code mark. In fact they are dated. By looking up the record the entire history of the can is readily obtainable. In foreign countries this policy has not as yet been introduced. In my judgment this procedure would not prevent botulism since dating of the cans does not preclude under-sterilization.

(4) I have in my laboratory numerous cans of food which have been preserved in 1920. The content is just as sound as it was twelve years ago when we sampled it for various tests. Very acid food (like berries and fruits) may occasionally act on the tin lining of the can and cause the elaboration of a harmless gas, or cause pin point perforation and corrosion of the container. Invariably these articles are removed from the trade as unmerchantable. Many years ago it was believed that the tin salts which may form in very old canned foods are harmful. Experimental studies conducted on human volunteers who ate such food in large quantities showed they have not suffered in the least. It may therefore be stated with emphasis that the content of old canned foods provided they were originally sterilized according to scientific methods are entirely free from harmful effects to the consumer.

(5) Today botulism is a problem for the home canner readily preventable provided he or she follows certain simple rules: (a) Non-acid foods (string beans, peas, fish, spinach, etc.) must be sterilized under pressure and in steam at temperatures above 212 degrees F. If no pressure cooker is available preserve in 8 to 10 per cent brine, pickle or dry the vegetables; (b) Never taste or serve the content of a jar of home canned food without thoroughly cooking or boiling it for at least fifteen minutes before serving; (c) Canned food that shows gas formation, is soft and mushy, should be treated with kitchen lye and then discarded.

Grocery Chain Store Sales in November

Daily average sales of grocery chain stores for November showed an increase of about 3½ per cent in dollar volume as compared with November, 1934, and were about 7 per cent above the same month of 1933, according to preliminary estimates of the Bureau of Foreign and Domestic Commerce. Sales decreased slightly from October to November which is usual at this season of the year; however, the decline was less than the average decrease from October to November for the past six years. Total sales for the first eleven months of 1935 were approximately 4 per cent above those for the corresponding period of the previous year.

Status of European Corn Borer in 1935

A supplement of the "Insect Pests Survey Bulletin" for October, published by the U. S. Department of Agriculture, contains the results of a survey of European corn borer infestation for 1935. The text of the report, which was prepared by A. M. Vance, Associate Entomologist, is here reproduced for the information of sweet corn canners.

A survey to determine the status of the European corn borer, as regards degree of infestation, in 1935, over much of the infested territory, was conducted by the

Bureau of Entomology and Plant Quarantine from August 16 to September 15 in the one-generation area, and from September 3 to 30 in the two-generation area. It was directed from the laboratory for European corn borer research at Toledo, Ohio, W. A. Baker in charge. This work was carried out essentially as planned and resulted in the examination of 1,900 cornfields, taken at random on a county or county-group basis, within 135 counties in Michigan, Indiana, Ohio, Pennsylvania, New York, Vermont, Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New Jersey, Maryland, and Virginia. Sixteen experienced men, working singly, were engaged in the field work and traveled a total of 37,760 miles during the survey.

The Conservation Department of Indiana and the State Department of Agriculture in Maine cooperated actively in the surveys in their respective States.

Field methods, previously proved satisfactory for supplying corn-borer abundance data adequate for comparisons between counties and county groups for one or more years, were employed. Generally, the counties situated in the older infested portion of the area were considered separately, and in each a total of 20 random fields were surveyed. In the more lightly infested sections the counties were combined in groups of 2 to 5, and in each group a total of 30 or 40 random fields were surveyed. The percentage of plant infestation was determined by a count of 100 plants in each field, and the average number of borers per infested plant was found by a dissection of 10 infested plants in each field of a county unit, and of 5 infested plants in each field of a county group.

In the one-generation area a very definite increase in corn-borer infestation occurred in 1935, over that of 1934, in southeastern Michigan, northeastern Indiana, and the northwestern quarter of Ohio, in decided contrast to the rather general decrease found in the same sections in 1934, as compared with 1933.

The territory in Michigan, Indiana, and Ohio which showed an increase in 1935 over 1934 comprised 50 (or 67.6 per cent) of the 74 counties surveyed in that part of the one-generation area. In 19 of the other counties included, the survey revealed no change in the corn-borer population from that of last year, and in one group of 5 counties in northeastern Ohio there was a decrease in infestation. In the same territory in 1934 only 1 county, the data on which were comparable with those of 1933, showed an increase over the previous year, while all other counties or county groups surveyed either exhibited no appreciable change or showed a significant decrease.

In Michigan, one of the most outstanding increases of the corn borer in 1935 occurred in the northern part of the "thumb," in the Genesee-Huron-Sanilac-Tuscola County group, where the average number of borers per 100 plants showed a nine-fold increase from 15.6 in 1934 to 142.7 in 1935. Of the 40 fields surveyed in this section, 23 (or 57.5 per cent) had average populations of over 100 borers per 100 plants; 10 (or 25 per cent) had over 200 borers per 100 plants; 3 (or 7.5 per cent) had over 300 borers per 100 plants; and one field had a maximum of 413 borers per 100 plants.

The most significant increase in Indiana was found in the Allen-DeKalb-Steuben County group, in the extreme northeastern corner of the State, where the average number of borers per 100 plants in 1935 was 27.8, or 3½ times as great as the average of 7.7 recorded in the same region in 1934. Infestation was apparent in the counts made in all 40 fields of this group, and a maximum of 142.8 borers per 100 plants was found in one field.

A considerable rise in infestation was apparent in the northwestern quarter of Ohio, where half of the counties surveyed fell within a zone of increase. As in previous years, the most heavily infested section in 1935 seemed to follow the

old lake bottom land extending in a southwesterly direction from the western end of Lake Erie. The highest infestations were found in Lucas and Wood Counties, which had averages of 121.5 and 91.2 borers per 100 plants, respectively. In Paulding, Putnam, and Sandusky Counties the borer populations were 12 times as great as those found in 1934, and in several of the more southern county groups the comparatively low infestation of 1934 had grown appreciably. Relatively light infestation continued in the eastern part of the surveyed area in Ohio.

The infestation in 1935 tended to remain about the same as in 1934 in a group of 3 counties in northwestern Pennsylvania, and in 8 counties of western New York, with significant decreases appearing in 5 counties immediately south of Lake Ontario. In the Albany, N. Y., section there was an increase this year over last.

Centre County in Pennsylvania was included in the survey in 1935 for the first time. An average of 22.5 borers per 100 plants was observed for the county, with most of the infestation occurring in its eastern and southeastern parts where average populations of 231 and 277 borers per 100 plants were found in two of the fields surveyed.

In Vermont, the figures on infestation in 1935 are not directly comparable with those obtained in 1934 because of a variation in the portion of the State included in the survey. The data for 1935 showed an average of 32.3 borers per 100 plants for the western part of Vermont. The heaviest concentrations of the insect were found in the extreme northern portion of the surveyed area where 4 fields contained average populations of between 100 and 350 borers per 100 plants.

Seasonal conditions in 1935 were apparently very favorable to corn-borer development in the western portion of the one-generation area and were undoubtedly responsible for the general building up of infestation from the low levels of 1934. An increase, such as found this year, emphasizes the potential of the European corn borer under favorable conditions. The decrease or lack of change of the infestation evident in northwestern Pennsylvania and western New York, in 1935, is not now explicable. Corn debris was scarce in western New York last spring, and possibly there occurred a considerable reduction of overwintering borers as a result of a greater utilisation of crop material for livestock feed following the droughty conditions of 1934.

In the two-generation area, the 1935 survey revealed no significant changes in infestation from 1934 in Massachusetts and Rhode Island, or in New Haven County, Connecticut, although a trend toward increase was apparent in the eastern tier of counties in Massachusetts.

Significant increases in infestation were found in the Strafford-Rockingham County group, New Hampshire; in Hartford and Middlesex Counties, Connecticut; in Suffolk County, New York; and in Monmouth County and the Atlantic-Burlington-Ocean County group, New Jersey. A decrease appeared in New London County, Connecticut.

Southeastern New England and eastern Long Island continued to be the center of heaviest borer concentrations. Extremely high populations of the insect were found in 1935 in Hartford, New Haven, and Middlesex Counties, Connecticut, and in Suffolk County, New York, where the average numbers of borers per 100 plants per respective county were as follows: 721.4, 469.2, 415.8, and 595. In 23 (or 38.3 per cent) of the 60 fields surveyed in the above-named three Connecticut counties the average was more than 500 borers per 100 plants, and in 9

(or 15 per cent) of the fields the average exceeded 1,000 borers per 100 plants, including a maximum of 2,340 borers per 100 plants in one field in New Haven County. In 9 (or 45 per cent) of the 20 fields surveyed in Suffolk County, New York, the average number of borers per 100 plants was over 500, and in 4 (or 20 per cent) of the fields it exceeded 1,000 per 100 plants.

The continued increase in corn-borer populations in New Jersey, and the extent of infestation found on the "Eastern Shore" of Maryland and Virginia, where a survey was made this year for the first time, are of particular interest because of the possible reactions of the insect in its spread southward to new environments.

In New Jersey, 46 fields (or 76.6 per cent) of the 60 fields surveyed in 1935 showed infestation by the borer as compared with 18 (or 45 per cent) of the 40 fields examined in the same counties in 1934. The heaviest infestations continued to be in Monmouth and Ocean Counties, where 6 of the fields this year contained populations of over 100 borers per 100 plants, with a maximum of 326 per 100 plants in one field.

Most of the infestation in the Wicomico-Worcester County group, Maryland, was confined to Worcester County. Eleven (or 36.7 per cent) of the 30 fields surveyed in the two counties were found infested with the European corn borer. The average numbers of borers per 100 plants in the four highest fields were as follows: 87, 67.2, 55.1, and 42.1.

The infestation in the Accomac-Northampton County group, Virginia, occurred largely in the upper two-thirds of the section. Twenty-five (or 83.3 per cent) of the 30 fields surveyed were infested by the European corn borer. The average numbers of borers per 100 plants in the four highest fields were as follows: 68, 66.1, 43.2, and 42.9.

Cold Storage Holdings of Fishery Products

Cold storage holdings of fishery products in the United States on November 15 were 1 per cent less than a year ago and 4 per cent greater than the five-year average, according to the Bureau of Fisheries. Holdings on November 15 amounted to 76,332,000 pounds, compared with 77,126,000 pounds on November 15, 1934, and the five-year average of 72,836,000 pounds, statistics show.

During the thirty days ended November 15, 20,776,000 pounds of fishery products were frozen compared with 12,053,000 pounds frozen in the corresponding period of 1934.

Florida Strawberry Marketing Agreement Terminated

Termination of the marketing agreement and license for shippers of Florida strawberries has been announced by the Agricultural Adjustment Administration, effective December 12th. Largely because of serious freeze conditions which materially reduced the movement of the crop last season, the provisions of the agreement and license were not placed in operation by the industry, according to the announcement, which further stated that amendment of the Agricultural Adjustment Act would necessitate certain changes in the program.

Fruit and Vegetable Market Competition

CARLOT SHIPMENTS AS REPORTED BY THE BUREAU OF AGRICULTURAL ECONOMICS, DEPARTMENT OF AGRICULTURE

Commodity	Week ending Dec. 14		Week ending Dec. 7	Total for season through Dec. 14	
	1934	1935	1935	1934	1935
Vegetables:					
Beans, snap and lima	153	128	100	14,598	11,429
Tomatoes	168	315	145	25,987	23,726
Green peas	27	177	158	6,877	7,801
Spinach	277	265	201	965	721
All other vegetables, domestic, competing directly	3,801	5,904	3,448	126,309	103,595
Imports, competing indirectly	35	61	53	536	784
Fruits:					
Citrus, domestic	4,055	3,877	3,892	26,471	21,698
Imports	4	15	13	255	376
Others, domestic	148	216	264	52,118	49,501

Trade Agreement with The Netherlands Signed

A reciprocal trade agreement with The Netherlands was signed on December 20th, this being the 9th agreement negotiated under the law of 1934. The details of the agreement as they affect canned foods will be given in next week's Information Letter.

CONTENTS

	page		page
Industrial Council to meet in January	4801	Status of European corn borer in 1935	4804
Trade agreement with Honduras signed	4801	Cold storage holdings of fishery products	4807
Preservers seek trade practice conference	4802	Florida strawberry marketing agreement terminated	4807
Setting an editor right as to botulism	4803	Fruit and vegetable market competition	4808
Grocery chain store sales in November	4804	Trade agreement with The Netherlands signed	4808